A New *Mozartius* (Coleoptera, Scarabaeidae) Found in a Schist Cave of Shikoku, Southwest Japan

Ву

Kimio MASUMOTO

15–9 Higashikamigo-chô, Totsuka-ku, Yokohama

(Communicated by Yoshihiko Kurosawa)

Abstract

A new aphodiine scarabaeid beetle belonging to the genus *Mozartius* is described from a schist cave lying at the central part of Shikoku, Southwest Japan. It is distinguished from the other congeneric species by the difference in size and in the sculpture of head and pronotum.

Through the courtesy of Dr. Shun-Ichi Uéno of the National Science Museum, Tokyo, I was given an opportunity to examine a pair of the specimens of a strange scarabaeid beetle obtained by him in a schist cave lying at the northern part of central Shikoku, Southwest Japan. It looked like an aphodiine at first sight, but possessed various peculiarities separating it from the tribe. After hesitating for some time, I finally decided that the beetle was a new species belonging to the genus *Mozartius* S. Nomura et Nakane (1951, p. 46), though the description of the genus did not show certain important characteristics.

I wish herewith to express my hearty thanks to Dr. Shun-Ichi Uéno, who not only allowed me to study and describe this interesting species but also read through the original manuscript of the present paper. Deep appreciation is also due to Dr. Yoshihiko Kurosawa for his kind aid extended to me during the course of this study, to Mr. Sadanari Hisamatsu for the loan of a specimen of *Mozartius jugosus* (Lewis), and to Mr. Toshitsugu Endo for drawing the fine illustration inserted in this paper.

Mozartius uenoi sp. nov.

(Figs. 1-5)

Body length: 3.2 mm.

Elongate and feebly constricted between fore and hind bodies; strongly convex above; pronotum and elytra sparsely bearing short bristles. Apterous. Dark testaceous; anterior portion of both upper and under surfaces of head, antero-lateral margins of pronotum, large part of elytra, legs, maxillary palpi and abdomen more or less lighter in color; antennae pale yellowish brown; short bristles on pronotum and elytra pale

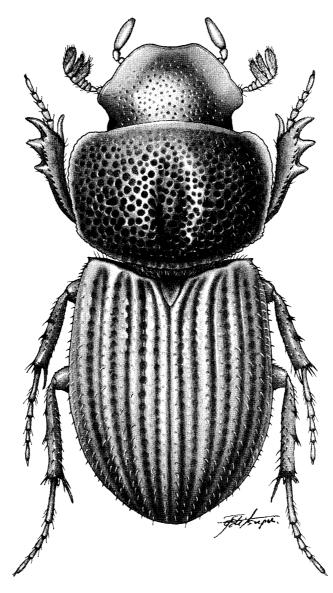
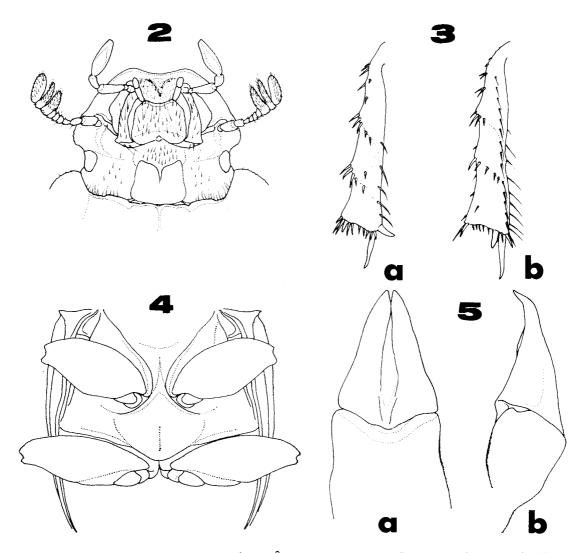


Fig. 1. Mozartius uenoi sp. nov., J, from Ôyamasama-no-ana Cave.

yellow; humeral teeth piceous; upper surface moderately shining, under surface less strongly so.

Head fairly large and somewhat transverse hexagonal, moderately convex; clypeus very broad, finely punctate, the punctures becoming smaller and sparser in front, front margin shallowly emarginate with lateral ends rounded and continuing to oblique and feebly arcuate lateral margins; genae medium-sized, moderately oblique, closely and coarsely punctate, each outer margin rather strongly produced laterad, weakly arcuate in anterior half, very feebly emarginate and narrowed posteriad; fronto-clypeal suture very fine, continuing to weakly raised fronto-genal sulci; frons short but extremely wide, rather closely punctate, punctures a little larger than those on



Figs. 2-5. Mozartius uenoi sp. nov., from Ôyamasama-no-ana Cave. — 2. Ventral side of head. — 3. Male middle and hind tibiae (viewed from below); a: middle tibia; b: hind tibia. — 4. Middle and hind coxae and metasternum. — 5. Male genitalia; a: dorsal view; b: lateral view.

clypeus; eyes degenerated, completely flat with imperfect facets, their transverse diameter about 1/14 the distance between eyes; mandibles membranous and concealed beneath clypeus; antennae nine-segmented.

Pronotum transverse, broadest at anterior third, roundly narrowed in front, sublinearly and feebly narrowed behind; apical border nearly straight; basal border arcuately convex; front angles narrowly rounded; hind angles weakly and obliquely truncate; disc rather strongly convex, closely and coarsely punctate, punctures large and shallow, microgranulate, their diameter about 2–3 times that of cephalic punctures, a little sparse in middle, sparsely bearing short bristles, with broad median groove; base bordered with coarse punctures; basal and lateral margins crenulate at the edge, distinctly so around hind angles. Scutellum medium-sized, triangular, very feebly depressed as compared with sutural intervals.

Elytra subovate, broadest at middle; disc with 10 strong striae, punctures in striae rather coarse and fairly ovate, the distance between them about 2–3 times their diameter, 8th stria short and not reaching base, 9th and 10th joining and reaching base, 1st and 10th, 2nd and 9th, 3rd and 8th, 4th and 3rd, 5th and 6th, and 7th and 8th joining respectively in apical portion; intervals strongly raised, sutural ones conspicuous, 2nd to 10th costate, strongly so in odd ones, scattered with microscopic punctures and short bristles somewhat arranged in a row on each interval; humeral teeth small but sharp.

Middle coxae not so closely approximate; metasternum shallowly and coarsely punctate, sparsely and finely pubescent, slightly convex and roundly concave in middle, with inverted Y-shaped ridge in front; metepimera covered. Abdomen microasperate, finely pubescent, deeply grooved along each base.

Fore femora strongly dilated and thickened, with the ventral surface flattened and coriaceous, middle femora also strongly dilated and thickened but the underside is not flattened and rather weakly coriaceous on the ventral surface, hind femora moderately dilated and thickened, weakly coriaceous; fore tibiae apically expanded, with tridentate outer margin, middle and hind ones with two transverse ridges on the outer side; middle tibia with a spur and a spine directed postero-ventrally; hind tibia with two spurs; tarsi slender, middle ones longer than middle tibiae, hind ones nearly of the same length as hind tibiae, basal segment of hind tarsus about 1.6 times as long as the longer spur, nearly of the same length as the three followings combined; claws small and weak. Male genitalia as illustrated.

Type series. Holotype: \circlearrowleft , Ôyamasama-no-ana Cave, Tanouchi, Shingû-mura, Ehimé Pref., Japan, 17–IV–1980, S.-I. Uéno leg.; paratype: $1 \circlearrowleft$, same data as the holotype. Deposited in the collection of the National Science Museum (Nat. Hist.), Tokyo.

Notes. This new species differs from the Mozartius species hitherto known in the smaller body, the absence of arcuate carina behind the apical margin of head, and the absence of oblique impressions on pronotum.

According to Dr. Uéno, the type material was found in a baited trap set for attracting trechine beetles in the dark zone of the cave. The location, morphology and environmental condition of the cave were already described in some detail by Uéno (1983, p. 131).

References

Balthasar, V., 1964. Monographie der Scarabaeidae und Aphodiidae der palaearktischen und orientalischen Region. Band 3. Aphodiidae. 652 pp., 2 pls. Verlag der Tschechoslowakischen Akademie der Wissenschaften, Prag.

Lewis, G., 1895. On the lamellicorn Coleoptera of Japan, and notices of others. Ann. Mag. nat. Hist., (VI), 16: 374-408.

- NAKANE, T., 1961. On the Scarabaeidae of Japan (VII). Ent. Rev. Japan, Osaka, 12: 50-63. (In Japanese.)
- Nomura, S., & T. Nakane, 1951. On some new and remarkable species of Aphodiinae from Japan and Formosa. *Kontyû*, *Tokyo*, 19: 35-47.
- SCHMIDT, A., 1922. Coleoptera. Aphodiinae. In Schulze, F. E., & W. Kükenthal (eds.), Das Tierreich, (45): I-XXXVI+1-614. Berlin u. Leipzig, Walter de Gruyter.
- UÉNO, S.-I., 1983. A new species-complex of the genus *Trechiama* (Coleoptera, Trechinae), with descriptions of three new taxa. *Bull. natn. Sci. Mus.*, *Tokyo*, (A), 9: 125-138.